# Tools for Internationalizing Higher Education in Developing Countries

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Abstract. The global nature of modern economy is reflecting heavily on higher education. Graduates are frequently finding employment in areas outside their home countries, and universities are targeting students away from their main campuses and integrating away-from-campus experiences into their programs. Producing graduates able to compete on the global scale is essential to modern tertiary education in all countries. Exposing students to modern trends in technology and diverse approaches to pedagogy figures high on the priority list of prominent schools. Higher educational institutions with limited resources are at a disadvantage here. In poorer countries, sending students out in large numbers may not be practical for economic, political and cultural reasons. In this paper we talk about a suite of initiatives tailored to help bring international education to local students at affordable cost in a developing country context. The measures include internationalizing curriculum and quality assurance practices, offering programs for international students to visit, learn and volunteer in interaction with local students and communities and recruiting prominent scholars from international universities and major corporations to teach courses to local students. Another tool is that of joint programs, graduate and undergraduate, with regional and international schools. The measures can be viewed not only as internationalization tools but also as ways to close the gaps in areas of weaknesses at the national level. Indicators of success for these initiatives include follow-up action such as local student/faculty stays abroad, joint work on capstone projects and graduate degrees, subsequent joint research programs, international accreditation and the level of future interest in similar initiatives. We report in some detail on a suite of initiatives aimed at exposing our students to international education in a cost effective manner; on the academic restructuring introduced to make student and faculty participation in international activities fit well into regular academic commitments, the challenges faced and solutions devised, the degree to which the goals were achieved and the sustainability of the effort in a resource limited environment of a third world country.

**Keywords:** Higher Education, Internationalization of Higher Education, Quality in Higher Education, Developing Countries.

## 1 Introduction and Motivation

The expanding higher education is a worldwide phenomenon. More people are joining higher education in most countries, including in developing nations[5]. The needs of the job market with the movement to the knowledge economy is one motivation. In developing countries many people view higher education as a requirements for better jobs and many are ready to make major investments to get a good education.

Higher education in many developing nations is a relatively recent development. In the Arab World, the traditional major universities in Cairo, Tunis, Fez, Mustansiriyya and Koufah and knowledge academies are quite old and had diverse student bodies and interactions. Modern institutions of higher education in the Arab region started appearing in the late 19<sup>th</sup> and early 20<sup>th</sup> century[1]. The count was 14 universities in 1953 and soared to about 700 by 2016[1,10]. Before 1967 Palestinians attended Universities in Amman and other Arab cities but that became too difficult with the cut-off from the Arab world in 1967. The first bachelor degree granting University in Palestine was established in 1972. Currently the number of Universities in Palestine stands at 15 with 3 more in the pipeline, serving a population of about 4.8 million people[2,7,8,9].

Most world universities are recognizing the importance of internationalizing higher education[3,4,6,11]. Many view the ability to attract qualified faculty members and students from other countries/cultures as a measure of, and a contributing factor to, institutional reputation. Competition for the best international students and faculty is quite high to the degree that many less developed countries are experiencing the so called "brain drain" phenomenon whereby the best qualified students tend to go abroad for an education/research but never come back to their home countries. They are attracted by the lucrative salaries, favorable work conditions and levels of support for academic work that cannot be matched in their home countries. A side effect of inward mobility is the exposure of students in the magnet countries to other cultures and interaction with foreign students/faculty, something that may not be available on the other side of the divide.

However, many international universities are also engaged in outward mobility where they encourage their students to go abroad for an international experience. The underlying assumption may be that the experience of living in another culture is an enriching one and is quite different from hosting people of other cultures at home. We certainly agree with this premise and believe that the immersive experience in visits abroad can be of great value to the participating student/faculty in terms of being exposed to so many aspects of the host culture, environment, educational system, work habits and more[6,8,11].

In this paper we will argue that if internationalization is important for higher education in general, it is more so for developing nations and more still in the Palestinian context characterized by isolation and restricted mobility and the fact that students are bound to be involved in international experiences after graduation. In Palestine, as in many developing countries, the local economy is unable to absorb graduates. It is estimated that more than 50% of graduates of Palestinian universities are employed abroad. Local institutions have insufficient graduate programs with limited PhD programs especially in engineering and technology and most students seeking graduate degrees will need to do it abroad. Many locally employed graduates are working with outsourcing companies and need to appreciate the wider international context. Successful local companies are working abroad and need to be aware of the international trends. All these factors work to emphasize the importance of the international experience for Palestinian students.

In the following we attempt to describe the Palestinian educational context with emphasis on points relevant to the internationalization of higher education.

## 1.1 The Palestinian Setting: *Economics*.

The per capita income for the close to 4.8 million inhabitants of Palestine is around US\$3K with wide variations between regions.. The annual university education cost is about US\$3K for fees plus US\$6K for living. Thus, an external experience for university students doesn't scale for being too costly compared to the per capita income[9]. A one week trip to Europe through Amman, Jordan, can easily cost US\$2K. Despite the economic problems, the majority of households are well connected to the Internet<sup>1</sup>, though mobile connectivity is severely limited due to licensing restrictions on Palestinian carriers[9]. The Palestinian economy capacity to absorb graduates is quite limited resulting in many graduates working outside the country and high unemployment, especially among the youth, including university graduates. The labor force participation rate is about 46% (72 for males and 19% for females) and the unemployment rate is around 26% (42%in Gaza and 16% in the West Bank)[9]. A sizable portion of the work force with university education is employed in other countries in the region, mostly in the gulf.

# 1.2 The Palestinian Setting: (im)Mobility.

Palestinians are quite isolated physically. Border crossings are outside the control of the Palestinians, with limited operating hours and high crossing costs. Currently, Palestine lacks own airport: Jerusalem airport was closed in 1967 and the Gaza airport was closed and its tower destroyed in 2000 after a 2-year period of operation. Any travel from the West Bank has to go through Amman/Jordan Airport: a 50 mile, 4-18 hours, 5 means of transport trip and a US\$200 expense.

<sup>&</sup>lt;sup>1</sup> Estimated at 64% user penetration in 2016; http://www.internetlivestats.com/internet-users/

Entry to the country is severely restricted and practically no work/study visas/permits are granted for foreigners, even students and faculty. Instead, tourist visas may be issued for 3 months max making full semester stays for students/faculty problematic and has to be interrupted by and exit and reentry for visa renewal. Palestinian expatriates, who are more likely to visit, are more severely restricted and their chances at getting a visa are generally slim. Re-entry to renew visas is not guaranteed and cases where visiting faculty members were denied reentry for extended periods are quite common.

Even within the country, major restrictions on road movement and roadblocks make internal travel between different parts of the country both expensive and torturous. The trip from Hebron to Birzeit University usually takes about 3 hours to cover the 50 KM aerial distance. This resulted in the "regionalization" of universities when close to 70% of the student population are from the same geographical area as the university. Earlier, in the absence of these restrictions on movement, the internal diversity situation used to be much better.

## 1.3 Palestinian Higher Education:

The Palestinians' commitment to education is quite high. The country has a universal schooling system and school attendance is mandatory up to 10th grade. The number of schools is around 2900 with around 1.2 million students equally divided between males and females and being instructed by 54K teachers, 60% female[9]. The illiteracy rate in the country is about 3% and is much lower for the younger generation, with some gender and regional variations. As stated earlier, Palestinian higher education is relatively new and the first class from a Palestinian university graduated in 1976. According to the ministry of Higher Education statistics the country has 15 Universities (14 traditional and 1 open), 17 University Colleges (Community colleges with some Bachelor programs) and 15 community colleges. Universities range from governmental to nonprofit public and for-profit private. Traditional universities had a student population of 130K students (2014/2015): 40 PhD students, 8K Masters and Higher Diploma students and the rest are Bachelor degree students. Add to that 60K students in the open education system. The annual new admissions stand at 35K students plus 14K in the open education system. The graduates were 25K from traditional universities and 8K from the open education. There were around 4K faculty members at traditional universities with 5% at the rank of full professor and 7% at the rank of associate professor. 60% are PhD holders. Some of the relevant to our discussion characteristics are as follows[2,7,8]:

## Palestinian Higher Education: Students.

There is much interest in Higher Education in Palestine. Females are very well represented and constitute the majority of current, enrolling and graduating students. Student diversity is minimal: there are practically no foreign students, not even Palestinian expats despite the fact that the majority (8 million) of the Palestinians live in the diaspora. The following table (Table 1) gives some student statistics at Birzeit Uni-

versity, which may be typical of other Palestinian Universities. The number of faculty memebrs at Birzeit is about 400, with 60% having PhDs and 30% females<sup>2</sup>. Even Regional representation in the student body is limited and has been declining lately and about 70% of Birzeit University students are from the region of the University.

Table 1. Birzeit University Student Enrollment for the Academic Year 2014/2015

Level/Faculty	Female		Male		Total
	Count	%	Count	%	Count
Undergraduate Students (BA Programs)	6276	64%	3,488	36%	9,764
Faculty of Arts	2,005	76%	631	24%	2,636
Faculty of Science	463	77%	136	23%	599
Faculty of Business and Economics	1,214	61%	765	39%	1,979
Faculty of Engineering & Technology	925	41%	1,355	59%	2,280
Faculty of Law & Public Administration	951	66%	489	34%	1,440
Faculty of Nursing, Pharmacy & Health Professions	557	87%	85	13%	642
Faculty of Education	161	86%	27	14%	188
Graduate Students (MA Programs)	763	65%	405	35%	1,168
Diploma and Others	66	73%	25	27%	91
Grand Total	7,105	64%	3,918	36%	11,023

While Arabic is the official language, English is a main language of instruction especially in science and technology education. However, English level varies much for students. Many students are apprehensive/shy about listening/talking with English native speakers. That's, until they have to do it, then things become easier! Local student experience is not at the forefront of technology be it in terms of teaching technology, internship opportunities, types of services encountered and more.

## Palestinian Higher Education: Faculty.

Faculty diversity is minimal in terms of nationality: practically no foreign (read: non-resident) faculty due to residency restrictions and denial of work permits. However, by degree source, the faculty is quite diverse. Most faculty members went to schools outside Palestine: in the Middle East (e.g. Jordan, Egypt), Western Europe (e.g. Germany, France), Eastern Europe (e.g. former Soviet Republics, Poland), North America (USA, Canada) and Asia (e.g. Japan, Malaysia, China). In-breading is deliberately avoided. Local universities have limited longer term formal contacts with international universities: few faculty spend sabbaticals abroad and some go for shorter visits at research centers abroad, mostly in Europe. An increasing number of faculty are getting involved in international projects, mostly with European partners through

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<sup>&</sup>lt;sup>2</sup> http://birzeit.edu/en/about/bzu-in-numbers

EU sponsored projects. Short term visits by international scholars to Palestinian universities is quite normal. Memberships of faculty and students in international professional societies is low but rising. Many faculty do participate in international gatherings: conferences, workshops to present their work. However, organizing international conferences in Palestine often proves problematic in view of uncertainties about visa issuance especially for people from regional countries and also due to internal travel difficulties. Needless to say that the adverse condition in Palestine and the attractive opportunities in the industrial nations and the Gulf contribute to the brain drain phenomenon[10] whereby the quite a number of qualified faculty members tend to take up positions there. Some maintain their links to home institutions in Palestine and are part of subsequent internationalization effort. Quite a number of international scholars participating in our international summer schools have their roots in Palestine or the region.

Faculty promotion require world class publications and research evaluation involves international scholars. This encourages faculty members to engage in international academic work.

#### Palestinian Higher Education: Curriculum.

Curriculum at Palestinian universities usually gives major consideration to international standards and curriculum recommendations, especially in technical disciplines. For example ACM/IEEE curriculum recommendations are followed for computing programs. International ABET accreditation for engineering and technology programs is being promoted as a quality assurance measure with some programs already undergoing accreditation and/or receiving it. International review is also an integral part of national accreditation procedures. Many programs use standard international textbooks. Some programs have standard international tests as an admission requirement. Recently, many schools have been resorting to joint programs, especially at the masters level, with regional and international partners, mostly through EU supported schemes. All these measures encourage student mobility and make it easier for international scholars to get involved in teaching at Palestinian universities. The involvement of international faculty in curriculum design/delivery for the single PhD program at Birzeit University was a major feature of the program and international faculty are actively involved in the program design and also in the implementation both as instructors and thesis supervisors.

# **2** General Internationalization Effort:

If internationalization is important for higher education in general, it is doubly important in the Palestinian context characterized by deep isolation, severely restricted mobility and border closures. The isolation problem is acute for undergrads since much of graduate studies are pursued abroad any way.

In an effort to boost the international dimension of Palestinian higher education, Birzeit University has embarked on several internationalization measures that worked in tandem during the past several years. We first list a collection of general schemes,

some of which are established and have been operational for decades now. In the next chapter we elaborate on couple of schemes that we thought especially important due to their reach and potential. Some programs are open to students from other Palestinian schools and other Palestinian Universities may have some similar programs.

## 2.1 Student Stays Abroad.

Under this scheme, select students are sent out for an international experience: industrial or purely academic. This involves about 20 students annually. These are mostly internships at major international/regional corporations or research centers and up to one year study abroad stays. They are mostly supported arrangements: most of the cost is borne by hosts or sponsors. Some are byproducts of other schemes: visiting foreign faculty inviting students for internships or mobility components of joint projects. Among the major international corporations/centers are: Google, Daimler Benz, CCC, Julich, CERN and many others.

The University has bilateral collaboration agreements with several Universities abroad: British, American, Canadian, French and more. Also some EU projects allow for student mobility (in both directions) at the graduate and undergraduate levels. This has been gaining in popularity over the past few years.

The University also established a co-op program where students are required to spend regular/summer semesters working in their area of specialization at companies. Some of the targets are international companies in Palestine and abroad. The success of this scheme is still below expectations, with the main reason for lower than expected demand being students' desire not to delay graduation.

## 2.2 Joint Programs with International Universities.

Several programs have been established as joint efforts between local universities and several international universities in the framework of EU projects. Examples are a master program in sustainable engineering<sup>3</sup> at Birzeit and Najah Universities in Palestine and Swedish, German and Slovenian universities. Another example is a master program in Electrical Engineering<sup>4</sup> jointly by Birzeit, Hebron Polytechnic and Kadoorie Universities in Palestine and Universities in the UK, France, Romania and Bulgaria. At the undergraduate level the Computer Science Department offers a minor in "serious games" in collaboration with universities in Palestine, Tunisia, Germany and Sweden. International faculty are involved in the design and delivery of these programs.

<sup>&</sup>lt;sup>3</sup>http://www.birzeit.edu/sites/default/files/Brochure%20Sustainable%20Eng\_NNU-BZU\_new%202.pdf

<sup>&</sup>lt;sup>4</sup>http://sites.birzeit.edu/enee/content/jmee

## 2.3 Faculty Research/Teaching Stays Abroad.

Some of these stays are undertaken through supported projects and mobility programs, mostly through joint Palestinian/EU projects and international support schemes like the Fulbright (USA); DAAD and Alexander von Humboldt (Germany); Royal Society (UK); the Tawoon-Welfare (Palestine) and AFSED (Kuwait) research awards. The beneficiaries are generally research active faculty members (20-30 per year). Some go abroad on sabbatical leaves supported by the University (about 5 a year). This is in addition to faculty attendance of regional/international gatherings to present their research: a scheme supported by the University budget and others (more than 50 a year) in addition to project mandated visits.

## 2.4 International Faculty Involvement in Teaching/Supervision.

We elaborate on the teaching part at the undergraduate level later, but want to stress the involvement of international scholars in teaching and thesis supervision of PhD students in the only PhD program (in Social Sciences) at the University. The plan is that each student is assigned two advisors: a local advisor and an international one. Many of the courses are also taught jointly by local and international scholars. The program also calls for local students to spend periods of their study abroad with their international supervisors and are encouraged to take postdoctoral positions abroad upon graduation. This is in addition to international faculty involvement in joint programs mentioned earlier.

## 2.5 The Palestine and Arab Studies (PAS) Program<sup>5</sup>.

Started in the early 1990s, the PAS program was designed for international students interested in a Palestinian experience. In this program foreign students learn about the local culture and engage in cultural activities while they learn Arabic, both standard (through a 5 course series) and colloquial (through a 3 course series) and attend courses on the Palestinian history, culture and politics (6 courses). Students are frequently placed with Palestinian families and are encouraged to mix with local students and the population at large. The program is offered in the summer as well as in regular semesters. In the current semester (first semester 2016/2017) eight different language courses are being offered in the program. To go around the mismatch between the University regular course duration of 15 weeks and the 3 month tourist visa granted to students the PAS courses are designed to be less than 3 months in duration so that students can finish their studies by the time their visas expire. This proved a big help to students, though quite a headache for the University. The number of enrolled students varies by the year but 100 is a usual enrollment in the program. Multiple opportunities exist for interaction between PAS students and regular students at the University, giving the former a chance to practice their newly acquired language skills and both parties a chance at cultural exchange.

<sup>5</sup>http://sites.birzeit.edu/pas/

# 2.6 International Summer Work Camp<sup>6</sup>.

Under this program, started at the University in 1981, students from abroad are invited to do volunteer work in the local community and to get acquainted with the local population. In addition to volunteer work the program allows visiting students to interact with colleagues at the University and to engage in local cultural activities. During the 35 years of its existence this program has been a valuable experience for its participants and their interlocutors locally, with quite a number of participants opting to return to Palestine in one capacity or another. The number of students participating each year is in the 10s and can reach 100.

## 3 Internationalization through Summer Schools

One aspect that was targeted at the University is that of offering Palestinian students an international experience at a minimal cost financially and in terms of time to graduation. Given the difficulties of sending out a sizable number of students for an international experience, the approach was to bring the experience to them. The motto was: 'if you can't go to international education let international education come to you'. The scheme started with computing, but is moving into the mainstream! The regulations were made quite flexible to accommodate mobility requirements: to allow sending students abroad and receiving faculty even for shorter courses. It wasn't like that always but there was a realization that flexibility is needed to integrate the international experience into the regular work of the University. Next we discuss aspects of two schemes involving international summer school organization at the University.

## 3.1 Volunteer International Faculty Summer Schools

The scheme was started in 2008. The idea was to offer special topic courses taught by international faculty for regular university students: *Graduate* and *Undergraduate* in the form of two week block courses, usually three credit hours each. Course duration was chosen to minimize the physical absence of foreign faculty from their home institutions to the accepted norms in academia (about the time for attending a conference: a week). A course in the summer school is usually divided between two faculty members, with at least one international. Usually students take one course at a time. Students and faculty may continue to work on course assignments beyond the visit time through the Internet. The full course is taught (live) by the lecturers and support is provided by local teaching assistants. Students from abroad, from other institutions in Palestine and practitioners from industry were also allowed/encouraged to enroll in these courses, though the number of outside students were below expectations. The number of courses offered each year was between 1 and 3 and the number of students varied accordingly. Students pay regular tuition. The scheme was supported by the University basically to pay for the plane tickets and accommodation of international

<sup>&</sup>lt;sup>6</sup> http://www.birzeit.edu/en/students/iswc

guest lecturers plus a minimal subsistence allowance. However, the total expenditure on a course was usually within the regular tuition paid by students taking that course.

# 3.2 Sponsored International Summer School<sup>7</sup>.

This is a well-designed and supported program for regular undergraduate students from Palestine with some regional representation. The program aimed at better visibility for Palestinian students to international faculty as well as exposure of local students and faculty to international best practices. The program was sponsored through a generous grant of US\$1Million from the Arab Fund for Economic and Social Development (AFESD). The goal was to have a select group of students in computing from Palestinian and possibly regional universities to get instructed by world class international faculty during the summer. Three to four one-week courses are offered each summer for each cohort at Birzeit University. Participating students have to commit for 3 years to finish the program. So the total number of participating students comes close to 60 at maturation. Only 4-5 students are selected from each participating University. The program is highly selective with incentives that included hosting at a local hotel for the duration of the school. Instruction is conducted in English and exclusively by international scholars and support is provided by local staff. This program has quite similar parameters as the voluntary program, but is longer: 3 years for each cohort (about 24 Credit Hours) and ends with a special certificate for each participating student while the voluntary scheme just adds the courses to the transcript. The program has an international and local advisory boards and a welldeveloped student selection system. The program is well supported financially and visiting faculty are very well compensated even by international standards. This is a reason that it is may be a one time arrangement for funding reasons.

Table 2 lists the affiliations of the international scholars in all schools.

Table 2. Affiliations of International Participants in the Summer Schools 2009-2013

#	International Scholar Institution	Country
1	Paris-Diderot University	France
2	University of Artois	France
3	Uppsala University	Sweden
4	University of Oxford	UK
5	Basel University	Switzerland
6	MIT	USA
7	U. of Michigan Ann Arbor	USA
8	UCLA	USA
9	Leeds University	UK
10	University of Kent	UK
11	SUNY at Stony Brook	USA
12	Princeton University	USA
13	Western Virginia University	USA

<sup>&</sup>lt;sup>7</sup> http://ibnsinaschool.org/index.php

## 3.3 Summer Schools Goals and Logistics.

#### Goals: Students.

The schemes sought to achieve, at no extra cost to students beyond the usual tuition, the following goals as far as enrolled students are concerned:

- Add an *International* dimension to education by having English speaking faculty teach the courses, which may also get them ready for future encounters with English speaking associates.
- Familiarize students with academic practices/parameters elsewhere, which may diverge from what they are accustomed to.
- Networking between students and foreign faculty with potential for graduate work opportunities and thus open new horizons for students interested in pursuing further education.
- Attract foreign students and encourage interactions with local students.
- Familiarize foreign faculty with local students and their potential, in the hope that they may consider having them at their schools for graduate work.
- Networking with peers from other local institutions and from industry.

We believe that many of these goals were achieved to a good degree. This was reflected in the evaluations by both students and faculty. There were minor to no success in attracting foreign students or even students from industry.

## Goals: Faculty/Institutional.

For faculty members and the University the summer schools sought to achieve the following goals:

- Exchanges on teaching methods/practices and curriculum.
- Fostering sustainable relationships with visiting scholars and their institutions.
- Closing any gaps in local expertise, especially in emerging technologies.
- Encourage longer term faculty level networking and research cooperation and possibly joint projects.
- A cultural exchange mechanism with foreign faculty and institutions.
- To have the visiting faculty offer support in curriculum evaluation at the institutional and national levels.

We believe that many of these goals were achieved. However, longer terms contacts between institutions didn't meet the expectations.

## Course, Faculty and Student Selection.

For the voluntary summer schools, topic selection tends to favor courses with less or no local expertise, cutting edge technologies/topics, and may favor areas where we can find world class scholars willing to get involved. Preference is given to faculty from reputable institutions. Usually we also favored advanced/upper level courses that can be taken by graduate and undergraduate students and in more than one discipline.

We also gave preference to courses that can accommodate remote interaction for major evaluation components such as term papers and independent projects. Another factor in the selection is diversity: we sought to have minimal repetition, represent more countries/institutions and school systems. Previous performance is a factor for repeat offerings. To reduce cost, international faculty working on joint projects with local universities were asked to serve as guest scholars in the summer schools.

Faculty selection for the supported summer schools targeted highly qualified faculty for the courses offered. There was a much larger pool here due to the generous compensation. The scheme had a director, a faculty member from a reputable University in North America with excellent worldwide contacts and understanding of the local environment. He managed the effort in coordination with the University and the recruitment was smooth.

Student selection for the voluntary program favored upper level and graduate students due to the nature of courses offered. The supported program had an elaborate selection scheme that emphasized performance and interest in postgraduate work.

#### 3.4 Obstacles to the Internationalization Effort in Palestine.

The attempts at internationalization in the context of Palestinian universities face many obstacles and are not easily implementable due to several factors that have to do with the political circumstance and the financial situation. Among the obstacles faced are the following:

- Out of synch teaching terms at Palestinian universities due to forced interruptions. The incompatibility of semester start/end dates with international universities tends to make it difficult for guest faculty to participate.
- Language barrier: many students are apprehensive about being taught by faculty who do not understand their native language and are shy to engage in interactive activities that require language skills. This may discourage participation by some. But it is our observation that this issue is resolved easily after the first encounters.
- Involvement of foreign students is minimal to none due to mobility restrictions and out of synch terms, though some regional/local participation proved possible.
- Travel issues: coming in, going out and moving inside the country can be quite problematic and some tend to be discouraged by own or colleagues' experiences.
- Political instability and the frequent flare ups resulting in reluctance of international students/faculty to visit Palestine, may be on advisories from their governments.
- Proliferation of such schemes may raise scaling and sustainability issues for the
  University. The schemes do not make money for the University, but rather are less
  economically viable than regular courses. Having too many such courses may raise
  sustainability issues. One would expect that such offerings will be capped at a certain percentage of the course offerings in the summer to make them sustainable. A
  less desirable scheme is to have cost differentials for summer school courses,
  which may limit the applicant pool.

#### 3.5 Measures of Success and Evaluation.

The University utilized a suite of tools to assess the success of its internationalization through summer schools effort.

- Each session was thoroughly evaluated by students and by participating faculty. The evaluation results were quite positive, with clear variations between sessions.
- The number of student applicants who wanted to join the schools each year. Except for the first offering, it was always high and steadily rising.
- We monitored the number of returning students: those who wanted to join the summer school after their first participation. This indicator was also encouraging, though many participants joined during their last year.
- Number of interested and returning international faculty. After the first couple of
  offerings these indicators were positive and we generally had more interested faculty than we could accommodate.
- We have hoped that the scheme will result in a number of international faculty spending their sabbatical years at Birzeit University. There was little success here.
- Interest of local faculty and assistants to get involved was consistently high.
- Networking leads/number of future exchanges and joint projects: here the success was limited, though one may want to give it more time to see.
- Proliferation was Steady. The scheme started in computing but elements of the scheme were adopted elsewhere at the University, frequently with changes to fit the different needs of individual programs and support limitations.
- Administrative support was steady and the University allocated the needed funding to get the program going. There was a realization that the returns on the limited investment are quite high for students, faculty and the institution.

## 3.6 Lessons Learned and the Way Forward.

We believe that the suite of tools implemented is promising and can go a long way to improve the internationalization of higher education in Palestine. To maximize the returns, the experiment must be continuously studied and improved.

## Lessons Learned.

- Interest can build up fast from all stakeholders despite initial reluctance as the added value becomes evident.
- The scheme can be easily extended to other disciplines and there was interest.
- More effort is needed towards institutionalization and publicity.
- Factor into summer school planning, factors like better synchronization with terms elsewhere and making it immune to interruptions.
- One may want to place more emphasis on industrial/practical experience of participants, especially visiting faculty.
- May need to offer additional options like winter schools
- Scaling issues need to be addressed in view of the local financial limitations.
- Continuous improvement is needed to deal with the changing environment/needs.

#### Improvement Paths.

- We may want to consider more delivery mechanisms: MOOCS, live parallel broadcasts of lectures, despite varying time zones.
- Better publicity on the local, regional and international levels, also through social media.
- More diversified participation: involvement of more local institutions, more emphasis on research for longer term collaborations, recruit people from diverse institutions/countries, including neighboring and developing countries, for a better international perspective.
- Better integration into regular university work and maybe make it a national effort.
- Make the effort two-way by having local faculty teach at international universities.
- Careful Pricing for better sustainability (without making it too expensive, though).
- Better incentives for foreign participants, not necessarily financial. E.g. combine teaching by international faculty/students with:
  - Opportunities to learn the language and culture,
  - Pleasure/tourism,
  - Work on other projects (sponsored, research, family visits by expats).
  - Local/regional conferences/projects/consultancies, lecturing tours at other local universities/research centers.

## 4 Conclusions and Comments.

In this paper we argued that the isolation of the Palestinian higher education system requires a major effort at integrating students and faculty into the global educational system and placing major emphasis on internationalization. We made it clear that if internationalizing higher education is a desirable goal elsewhere, it is a must in the Palestinian context due to its imposed isolation. We elaborated on a multiplicity of measures that were applied to achieve the desired internationalization goals. We stressed that the schemes utilized need to be cost effective in order to make them scalable and sustainable in the longer term. We find general measures through joint projects and exchanges important tools, but also advocate that low cost volunteer summer schools may be more effective tools for exposing larger numbers of students to international education. It may be wise to work on a national scheme directed at internationalization that involves multiple local institutions in addition to international players. The current effort needs to be further integrated into the mainstream of University work and expanded to more disciplines and to more potential guest lecturers/institutions. Our experience shows that the success of such effort, while certainly possible, cannot be taken for granted due to the many factors that affect the success, many of which may not be under the control of participants. To that effect we offered some suggestions for improvement. We stressed the need for an informed debate/assessment process and a continuous improvement mechanism to help achieve the set goals.

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