Research summary

International Baccalaureate Diploma Programme: Study of North and South American students' civic-mindedness

Based on a research report prepared for the IB by:

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Background

The International Baccalaureate (IB) is a non-profit educational foundation that currently works with over 3,600 schools in 146 countries to provide young people with academically rigorous educational programmes designed to help them become engaged world citizens who are active, compassionate, lifelong learners. The creativity, action, service (CAS) component of the IB Diploma Programme is designed to involve students in a range of experiential service activities to enhance their personal, interpersonal and civic development. Creativity is interpreted broadly and may include participation in arts-related activities or be defined as the creativity students demonstrate in designing and implementing service projects. Action can include participation in sports or any type of local or international projects, including those associated with service activities. Service activities include any form of volunteerism in which students serve the community.

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In 2012, the IB commissioned RMC Research to examine the extent to which participation in the CAS requirement helped students to develop civic-mindedness and experience a variety of other social, personal and civic impacts. Civic-mindedness has multiple definitions in theoretical and research literature, most of which have to do with the individual's sense of identity as a citizen of a community, his or her sense of responsibility and attachment to that community, and the actions that the individual takes on behalf of the community. This study explores the types of experiential learning activities and service that students perform; the ways in which various sites and students conceptualize and operationalize civic-mindedness; students' motivations to choose their particular types of service; whether students think they can impact local, national or global issues through their efforts; the perceived impacts that participation in CAS has had; and variations by country. The study was conducted in two phases—a qualitative exploratory study and a quantitative investigative study.

Research design

This project used a two phased approach to address the research questions. An exploratory study was conducted first, followed by a larger Phase 2 study.

The exploratory study design featured interviews with CAS coordinators and focus groups with IB Diploma Programme students. The study utilized an international convenience sample designed to represent 14 schools in the United States, Canada and Argentina. The final sample included 19 CAS coordinators and 112 students. The information from this phase of the study was used to develop a survey that was administered in Phase 2.

The second phase was designed to investigate the impact of CAS on student acquisition of constructs related to motivation to serve, types of activities in which students participate, variations by region, programme quality and impact on students. In addition, RMC Research investigated the factors that served to moderate impacts. Surveys were constructed based on the research questions, findings from Phase 1, and a literature review. Two surveys were developed by RMC Research—a student survey and an alumni survey. Schools from Canada, the United States and a variety of South American countries were asked to participate. The resulting sample was composed of 58 schools: 17 from Canada, 29 from the United States and 12 from South American countries. The sample included 1,295 students. Alumni from each of these countries were also contacted and 214 completed the survey.

Findings

Exploratory phase (Phase 1):

To gain a deeper understanding of the range and depth of activities in which students engage as part of their CAS work, the researchers designed a qualitative study that included interviews with CAS coordinators and focus groups with current IB Diploma Programme students. The results of this phase are presented below.

Types of service activities in which students engaged

There is no single area in which service activities were concentrated. Rather, students participated in a wide range of activities that included tutoring young children, working in soup kitchens, visiting elderly residents in assisted living facilities and conducting fundraising and/or donation drives to benefit families in other cities or countries.

School approaches to helping students meet CAS requirements appeared to vary somewhat by country. This phase showed that schools in Argentina were most likely to provide organized activities for students to meet CAS requirements, whereas schools in the United States were more likely to leave students to their own devices to find service opportunities. The two schools in Canada differed, with one providing some organized activities and the other prompting students to choose their own.

The concept of civic-mindedness

Many students did not have a clear understanding of the meaning of civic-mindedness. However, most believed that they should engage in activities to help the community. Conceptions of civic-mindedness also seemed to differ by country: in Argentinean schools, the concept appeared to be related to having an obligation to help others because the students were privileged and others were not; in Canada and the United States, the concept appeared to be related to developing an ethic of service.

Students associated the CAS requirement more closely with personal development and efficacy than a drive to make a difference in the world. Both students and CAS coordinators believed that the purpose of CAS was to help them develop skills beyond the academic domain. The service requirement was conceptualized by many as an effort to develop "the whole child" or to push students out of their comfort zones.

Motivations to participate in particular service activities

The vast majority of students in the focus groups reported that they were motivated by altruistic or humanitarian reasons rather than pragmatic reasons, such as improving their chances to get into a specific college. Most students selected their projects because they heard about service opportunities from their friends and/or the IB coordinator and thought the activity would be interesting. Student choices of service projects were also influenced by friends, parents and career interests.

Generally, students felt the greatest sense of efficacy when they served in local settings, and believed they could make a greater difference at the local rather than national or global levels. As one student reported:

> *It's much easier to contribute locally. It's certainly easier physically and you can have a visible impact. It makes a big difference in some people's lives and you can see it, like the impact of Operation Christmas Child. Globally is harder. You always feel bad because someone is being ignored. We tend to raise funds for those who get a lot of publicity, like some of the communities in Africa. It's easier when you somehow have a cultural connection, where there is a face to the story. Otherwise you just don't know how much of your contribution goes to the cause. It's just harder.*

Perceived impacts

Students and coordinators at all sites mentioned a range of personal and social development outcomes that derived from the provision of service. Both groups thought students developed an ethic of service, became more caring, open-minded, and reflective, and developed more self-confidence and maturity.

Despite their struggle with the term "civic-minded," students reported that they had a better understanding of their place in the world and a feeling that they could make a difference. This sentiment was widely held by all of the students in Argentina and most of the students in Canada. There was less consistency in the responses from students in U.S. schools.

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Those who reported an impact said that they could see visible results of their efforts. Others felt that they had limited or no impact, especially when they raised funds and did not know how the funds were used, when students had a negative experience or when students set goals that were unrealistically high.
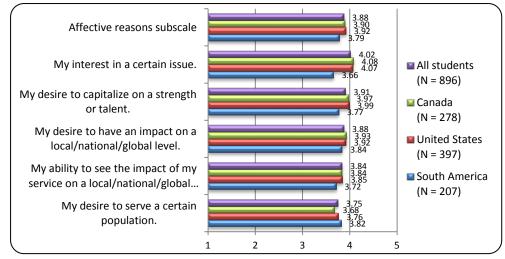
Phase 2

Analysis of survey data in Phase 2 showed the following results:

Motivation to serve

Results from Phase 2 suggested that students enrolled in the IB Diploma Programme and alumni of the Diploma Programme were motivated to serve most often by affective rather than practical reasons.[1] Figure 1 shows the degree of influence of specific affective reasons students provided for engaging in service. The subscale ranges from 1 (strong negative influence) to 5 (strong positive influence).

Figure 1
Average student motivation ratings for the affective reasons subscale

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[1] *Practical motivation* refers to practical considerations such as desire to work with friends during the activities, improving their resumes, and continuing an activity in which they were already involved. *Affective motivation* includes factors such as students' interest in a certain issue, their desire to have an impact on a local/national/global level, and their desire to serve a certain population or work on a particular issue because they believed they could make a tangible impact on the targeted group or issue.
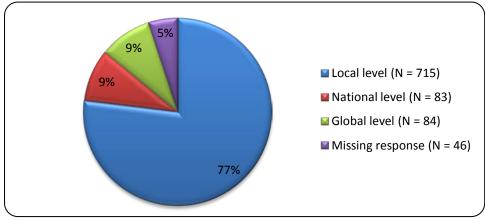
Similar to the findings in the exploratory phase, most students reported that they participated in a particular type of service because they were interested in the topic. Peers and family members also had a positive influence on the choice of service activities, though the influence had a small effect size[2]. There were variations in motivation by country, with students from Canada and the United States motivated to select a particular service activity most often by personal interest and students from South America motivated most often by friends. Involvement in a religious organization also had a slight positive influence on students' motivation to participate in service activities.

Participation in CAS activities

IB students participated in a wide variety of types of service to fulfil their CAS requirements, most frequently in education and fundraising. Students target their services to the local level far more often than to the national or global level. As Figure 2 shows, 77% of Diploma Programme students in year two focused on local service activities.

Figure 2

Students' global, national and local activities as the primary focus for students in year 2 of the Diploma Programme

- Local level (N = 715)
- National level (N = 83)
- Global level (N = 84)
- Missing response (N = 46)

Observations on the CAS experience

Students across the region typically agreed that their service activities were meaningful, as demonstrated by the overall rating for the "Meaningful service activities subscale" and scale items shown in Table 1.[3]

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[2] Effect size (ES) is a name given to a family of indices that measure the magnitude of a treatment effect, represented by differences in outcomes across groups. Unlike significance tests, these indices are independent of sample size. Cohen's *d* is the measure of effect size used for this study. Typically an effect size of .2 or less is considered small; .5 (.3 to .7) is considered medium or moderate; and .8 or higher is large.

[3] Students rated items on a 4-point Likert scale where 1 = Strongly disagree, 2 = Disagree, 3 = Agree, and 4 = Strongly agree.

[a] The "All students" column includes the 16 students who did not indicate their country or territory, and is therefore larger than the sum of Canada, United States and South America. Bolded text indicates composite scales.

Table 1

Extent to which students perceived their service activities as meaningful

	Canada			United States			South America			All students[a]		
	N	M	SD	N	M	SD	N	M	SD	N	M	SD
Overall rating for "meaningful service activities subscale"	**275**	**3.35**	**.59**	**392**	**3.36**	**.64**	**204**	**3.21**	**.74**	**885**	**3.33**	**.65**
I feel that my service activities were meaningful.	271	3.40	.67	388	3.43	.70	199	3.22	.85	871	3.38	.73
The skills that I learned from my service activities were important to me.	264	3.31	.68	379	3.26	.74	201	3.19	.82	857	3.26	.74
My service activities were important to me.	264	3.35	.69	384	3.39	.70	198	3.24	.87	859	3.35	.74

Although having a link to curriculum has been shown to be a strong predicator of high service outcomes, current students reported that the service activities were not often linked to curriculum. The majority of students had a voice and choice in selecting the service in which they participated. There were, however, statistically significant differences found between countries with students from Canada and the United States reporting greater student voice than students from South America.[4] Reflection is a key component of ensuring that service activities have an impact on students' civic and personal/social development. Reflection activities, though, were occasional; most often occurring after service was provided. Students participated more often in low-depth rather than high-depth reflection activities. There were regional differences in the quality of reflection. South American students were significantly more likely to engage in high-depth reflection activities than students from the United States.[5] The same patterns were observed in alumni responses.

Impacts of CAS participation

Participation in CAS had a moderate impact on student self-efficacy and acquisition of leadership skills and a small impact on acquisition of research skills. Students reported a small impact of participation in service on their civic attitudes, leading to the conclusion that participation in the programme did not affect students' civic-mindedness in a meaningful way. Students did appear to acquire civic skills. For this study, civic skills were defined as the development of skills related to meeting a community need, such as developing a plan, assembling a team, organizing and managing meetings, expressing a point of view to others and developing the skills needed to address the specific need. Most students reported that they could perform a range of civic skills well, though not "very well."

Most currently enrolled IB students expressed a "moderate" ethic of service and sense of social responsibility, and reported they would occasionally continue to help others. Alumni expressed a greater ethic of service, reporting that they currently engaged in service occasionally and anticipated they would do so in the future.

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[4] Student voice subscale: $F(2, 859) = 4.254$, $p < .05$. Canadian students ($M = 3.42$, $SD = .61$) and South American students ($M = 3.26$, $SD = .67$), $p < .05$, $d = .25$. Students from the United States ($M = 3.39$, $SD = .67$) and South American students ($M = 3.26$, $SD = .67$), $p < .05$, $d = .21$.

[5] High depth of reflection: $F(2, 876) = 3.971$, $p < .05$. Ratings from South American students ($M = 2.18$, $SD = .48$) were higher than ratings from United States students ($M = 2.07$, $SD = .51$) with a large effect size, $p < .05$, $d = .87$.

Factors that influenced or moderated impacts

Multiple demographic, motivational and programme design characteristics influenced outcomes for participating students.

- Females reported higher impacts than males.
- Students involved in religious organizations reported higher impacts than those who were not involved.
- Students with prior experience in provision of service reported higher impacts than those with no or lower levels of experience in providing service.
- Families and peers had an influence on outcomes.
- Students motivated by affective reasons had higher outcomes than those motivated by practical reasons.

Phase 2 of the study also suggested that quality mattered in CAS programme design. High quality service-learning programme design features strongly influenced all outcomes.

- The extent to which students participated in **meaningful service** strongly impacted every outcome area, with effect sizes considered to be large to very large on measures of personal and social development, civic development, ethic of service, and overall impacts.
- **Link to curriculum** was related to higher impacts in all areas. The highest effect was on researching an issue and perception of tangible impacts. Effect sizes were in the moderate range.
- The extent to which students were provided a **voice and choice** in their activities also had a moderate to large influence on all impacts that were measured.
- The **timing and frequency of reflection** experienced by IB students was found to have a small to moderate impact on outcomes. Reflecting before, during and after service had a positive influence on outcomes, with effect sizes in the low to moderate ranges. Effects were highest for the reflection activities that occurred during service, followed by those that occurred prior to service.
- **Respect for diversity, expressed as valuing others' opinions**, had a statistically significant relationship with a variety of outcomes. Effect sizes were in the moderately high range.
- IB students also were more likely to report a variety of outcomes related to personal, social, and civic development when they could see **tangible results of their efforts**. Effect sizes for this variable were in the moderate to large range.

Recommendations

Based on the study, the researchers provide a series of recommendations to enhance the effectiveness of the CAS requirement in cultivating civic-mindedness among Diploma Programme students:

1. IB programmes should do more to help students see the affective value of the provision of service.
2. Service portions of the CAS activities should look more like service-learning than community service.
3. Service activities should be better linked with what students are learning in their other classrooms.
4. To increase the development of civic-mindedness, CAS coordinators should develop a stronger set of reflection and/or investigation activities.
5. CAS coordinators should separate the requirements for creativity and action from service.