

Community and Conservation Fellowship Impact Analysis

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Global Diversity Foundation

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1 Introduction

1.1 Objective

This report provides an in-depth analysis of the impact of the Community and Conservation Fellowship on both individual skills and organisational capabilities. The evaluation is based on pre- and post-program self-assessments from 26 fellows, offering valuable insights into areas of effectiveness and opportunities for improvement. Specifically, the report aims to:

- Assess the extent of improvement in individual skills as a result of the trainings, examining how specific competencies, such as **Leadership** and **Time Management**, have evolved.
- Measure the progress in organisational capabilities, such as **Project Management** and **Fundraising**, to understand how the trainings strengthened participants' organisational capabilities.
- Compare the improvements between individual and organisational skills, identifying trends and differences in how these two domains were impacted by the program.
- Evaluate the homogeneity of improvement among fellows, exploring whether certain skills showed consistent growth across the cohort or if variability exists, indicating diverse participant experiences and outcomes.

By analyzing these components, this report seeks to provide a comprehensive overview of the CCF's effectiveness, highlighting both the successes and areas where further development may be needed.

1.2 Targeted Skills

Table 1 provides an overview of the individual and organisational capabilities targeted by the CCF, addressing both personal development and organisational effectiveness.

Individual skills	Organisational capabilities
Writing proposals and reports	Fundraising
Communication	Donor Relations and Communication
Confidence	Organisational Strategy
Collaboration	Project Planning and Design
Mentoring	Project Management
Leadership	Monitoring & Evaluation / Impact Measurement
Conflict Management	Financial and Technical Reporting
Time Management	Finance and Budget Management
Adaptability	Partnership Building
	Community Engagement
	Communications and Outreach
	Human Resources Management and Staff Retention
	Risk Management
	Conflict Management

Table 1: Individual skills and Organisational capabilities

1.3 Key Findings

- The CCF has yielded positive results across a broad range of skills. All organisational and individual skills, except **Community Engagement**, showed a median improvement of 1 rating score (such as moving from "Medium" to "High" or from "High" to "Very High") or higher, indicating substantial progress across most areas. However, **Community Engagement** stood out as the highest-rated skill in the pre-CCF self-assessments, with over 80% of fellows rating their proficiency as High or Very High, leaving limited room for further improvement.
- **Monitoring and Evaluation / Impact measurement** had the highest average improvement, highlighting the program's strong impact in this area. This skill was initially the lowest-rated on average in the pre-CCF surveys.
- Notable improvement was observed in **Time Management**, **Leadership**, and **Mentoring**, reflecting the positive development of personal capacities among the

fellows.

- Skills like **Writing Proposals and Reports** and **Financial and Technical Reporting** exhibited low variability in reported improvement, indicating that these were uniformly impacted by the trainings. Fellows across the cohort reported similar levels of improvement in these skills.
- Some skills, such as **Donor Relations and Communication** and **Partnership Building**, displayed higher variability in improvement, reflecting that while some fellows benefited greatly, others showed little to no progress. This suggests that a more tailored approach might be necessary for these areas to ensure consistent improvement across fellows.

2 Data Analysis and Results

2.1 Data Preparation

2.1.1 Key Variables

Table 2 presents the individual and organisational skills alongside their corresponding variable names, as used for analysis in the following sections.

Skill	Variable
Writing proposals and reports	individual_proposal_report
Communication	individual_communication
Confidence	individual_confidence
Collaboration	individual_collaboration
Mentoring	individual_mentoring
Leadership	individual_leadership
Conflict management	individual_conflict_management
Time management	individual_time_management
Adaptability	individual_adaptability
Fundraising	organization_fundraising
Donor relations and communication	organization_donor_relation
Organisational strategy	organization_strategy
Project planning and design	organization_project_planning
Project management	organization_project_management
Monitoring and Evaluation / Impact measurement	organization_me_impact
Financial and technical reporting	organization_ft_reporting
Finance and budget management	organization_fb_management
Partnership building	organization_partnership_building
Community engagement	organization_community_engagement
Communications and outreach	organization_communication_outreach
Human Resources management and staff retention	organization_hr_staff
Risk management	organization_risk_management
Conflict management	organization_conflict_management

Table 2: Skills and Corresponding Variables

2.1.2 Data Processing

Rating Scale

Fellows self-assessed their proficiency in various skills using a scale ranging from "Very

Low” to ”Very High.” To facilitate the analysis, this categorical scale was converted into a numerical scale, with the following mapping:

Survey Scale	Numerical Scale
Very Low	1
Low	2
Medium	3
High	4
Very High	5

Table 3: Rating Scale

Handling Missing Values

One missing value was identified for the **Fundraising** skill. To address this, the missing value was replaced with the median value for this skill, ensuring the integrity of the analysis.

2.2 Pre-CCF Skills Rating Description

2.2.1 Overview

Figure 1 illustrates the distribution of ratings across various skills, with 50% of participants’ ratings captured within the green boxes for individual skills and the red boxes for organisational capabilities. The skills are ordered by their mean ratings, with the highest-rated skills displayed first.

Skill Ratings:

The majority of skills have a **median rating of 3**, indicating a medium level of proficiency. Only two skills—**Adaptability** and **Community Engagement**—have a median rating above 3, while one skill—**Monitoring and Evaluation / Impact measurement**—falls below 3. This suggests that participants generally rated themselves and their organisations at medium level of capacity across a wide spectrum of skills.

Comparison Between Individual and Organisational Skills:

Individual skills consistently receive higher mean ratings compared to **Organisational**

capabilities, suggesting that while participants feel confident in their personal abilities, their organisations may struggle more in key areas. This points to a need for capacity-building initiatives focused on organisational development.

Distribution of Ratings within the Cohort:

For organisational capabilities such as **Project Management**, **Financial and Technical Reporting**, and **Finance and Budget Management**, there is no variability in ratings among the cohort, with most fellows rating their proficiency as medium. On the other hand, skills like **Adaptability**, **Mentoring**, and **Organisational Strategy** show greater variability, with ratings ranging from Low to High. This variation suggests differing levels of expertise or confidence among fellows.

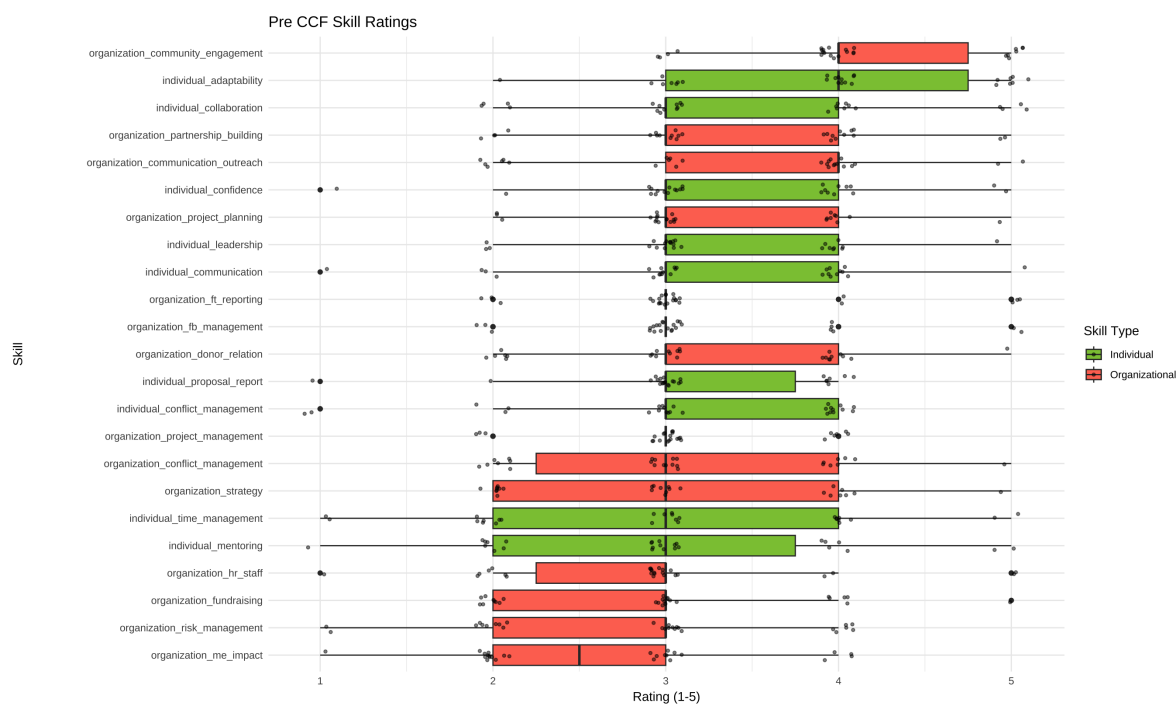


Figure 1: Pre-CCF Skills Ratings Distribution

2.2.2 Correlation

Given the subjective nature of the ratings provided by the fellows, reflecting personal perceptions, we use Spearman correlation to analyze the relationship between these skills: whether a fellow’s rating in one skill tends to increase or decrease in relation to another skill, regardless of the specific numerical values assigned. Spearman correlation is particularly effective for this purpose as it focuses on the ranks of the data, allowing us to

identify underlying trends in fellows' perceptions of their skills and better understand the direction of change in skill ratings rather than their exact magnitudes.



Figure 2: Correlation Matrix for Pre-CCF Skills Assessment

Figure 2 presents the correlation matrix of skills as rated by the fellows prior to the CCF. Notably, the only strong correlations identified (with an absolute value greater than 0.7) are positive, and between the organisational skills: **Project Planning** and **Project Management**, as well as **Financial and Technical Reporting** and **Finance and Budget Management**. These correlations suggest that fellows who rated one of these skills highly were likely to rate the other highly as well, which is expected given the close connection between these skill sets. No clear correlation patterns were observed among the remaining skills.

2.3 Post-CCF Skills Rating Description

Figure 3 visually summarizes the distribution of ratings across various skills after the CCF program, ordered by their mean ratings, with the highest-rated skills displayed first.

Skill Ratings:

A preliminary analysis of the post-CCF skills rating figure shows that all skills have improved in ratings compared to the pre-CCF phase. The median ratings for most of the skills have shifted from 3 (medium) to 4 (high), indicating a general increase in proficiency after the program. Notably, individual skills such as **Collaboration** and **Confidence** have a median rating of 5, reflecting a very high level of proficiency in these areas. Additionally, it is important to note that no fellow rated any skill as Very Low.

Comparison Between Individual and Organisational Skills:

Individual skills still have consistently higher ratings, with several clustering around high and very high levels of proficiency. However, some organisational skills, such as **Human Resources Management and Staff Retention** and **Risk Management**, though improved, remain clustered around medium to high ratings. This suggests that while progress has been made, there is still room for further improvement in organisational development.

Distribution within the Cohort:

While pre-CCF ratings exhibited greater variability across skills, the post-program results display a more consistent trend toward higher ratings. Skills like **Collaboration** and **Confidence** now show less variability, with most participants rating themselves at 4 or higher, indicating overall growth and skill consolidation within the cohort.



Figure 3: Post-CCF Skills Ratings Distribution

2.4 Skills Improvement Analysis

To measure skill improvement, we converted the qualitative ratings (e.g., "Very Low", "Low", "Medium", "High", "Very High") into numerical values. The difference between the final ratings (collected after the program) and the baseline ratings (collected before the program) was used to compute the improvement for each skill. An improvement score of 1 corresponds to an increase by one level, such as moving from "Medium" to "High" or from "High" to "Very High." Conversely, a negative score indicates a decline in the skill rating, while a score of 0 reflects no change.

Figure 4 showcases a heatmap illustrating the skill improvement for each fellow across the various skills. The green cells indicate positive improvements, with darker shades representing larger gains, while red cells represent a decline in skill levels. Beige cells indicate no change.

From the heatmap, we can observe that while most skills showed improvement in their ratings, some experienced a decline. A potential reason for this could be that as fellows advanced in the program, they gained better self-awareness and reassessed their abilities more critically, resulting in lower post-program ratings despite actual progress.



Figure 4: Heatmap of Skills Ratings Evolution

2.4.1 Individual Skills Improvement

Figure 5 presents a boxplot summarizing the distribution of improvement scores for individual skills across all fellows, ranked by their average improvement, with the highest gains shown first.

Overall Positive Trend:

All skills exhibit positive median improvements of 1 point, indicating general progress in individual skills among the fellows. Certain skills, such as **Time Management** and **Confidence**, show relatively high variability, with 50% of fellows reporting improvements ranging from 0 to 2 points. This suggests diverse experiences and outcomes in these areas.

Conversely, for the skill **Writing Proposals and Reports**, the boxplot is collapsed around the median value of 1, indicating that most fellows reported an improvement of exactly 1 point. This reflects a high level of consistency in the gains for this skill, with very little variation among fellows.

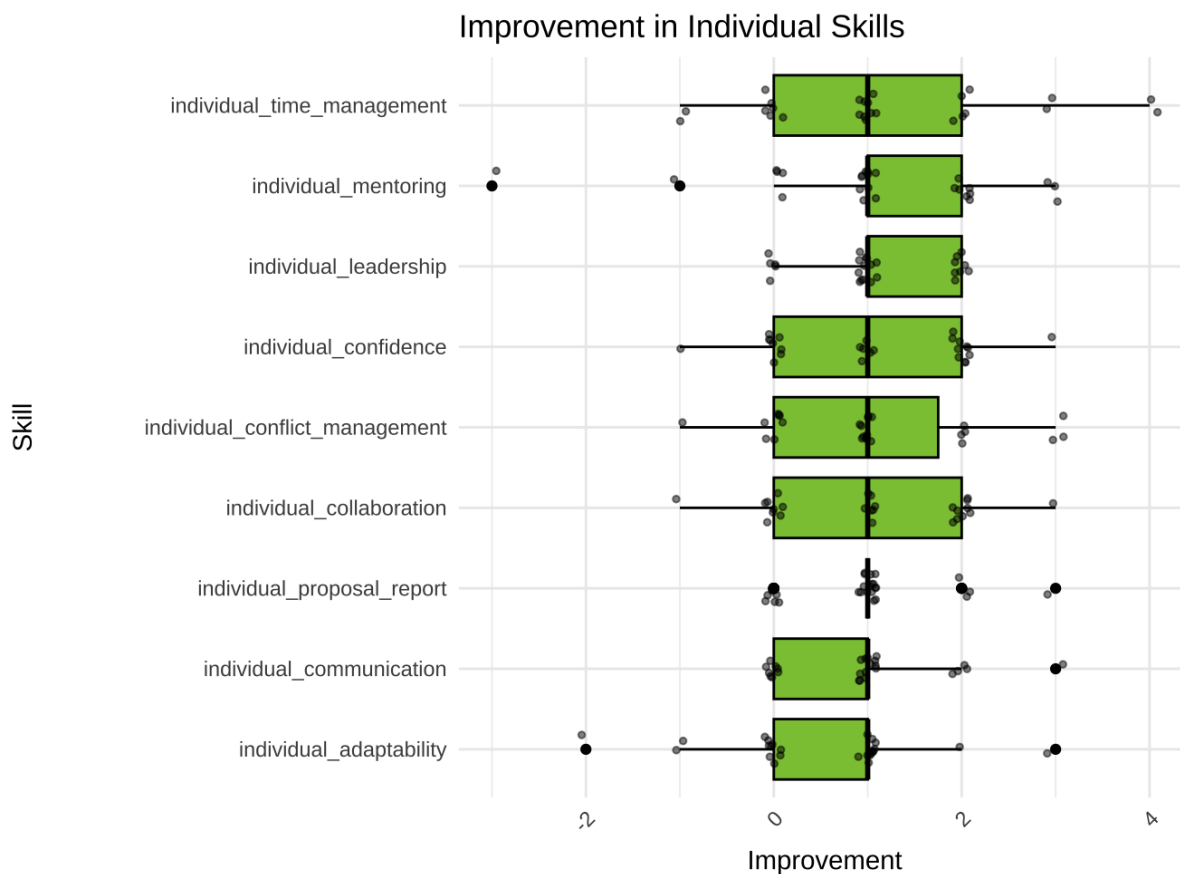


Figure 5: Individual Skills Improvement

2.4.2 Organisational Skills Improvement

Figure 6 illustrates the distribution of improvement scores across organizational skills for fellows, ordered by their mean improvement.

Overall Positive Trend:

All organisational skills show a median improvement of 1 point, except for **Community Engagement**, which has a median of 0, indicating minimal or no improvement for this skill among fellows. In contrast, **Monitoring and Evaluation/Impact Measurement** stands out with a median higher than 1, reflecting the strongest improvement across the cohort.

Skills such as **Donor Relations and Communication**, **Human Resources Management and Staff Retention** and **Partnership Building** show greater variability, suggesting that fellows had more diverse experiences with these skills, with improvements ranging from 0 to 2 points for a notable portion of the cohort.

Financial and Technical Reporting has a collapsed boxplot, indicating uniform improvement, with most fellows reporting a 1-point improvement. Other skills, such as **Organisation Strategy**, **Fundraising**, and **Monitoring and Evaluation/Impact Measurement**, exhibit low variability, meaning these skills were more consistently impacted by the trainings, with fellows experiencing similar levels of improvement.

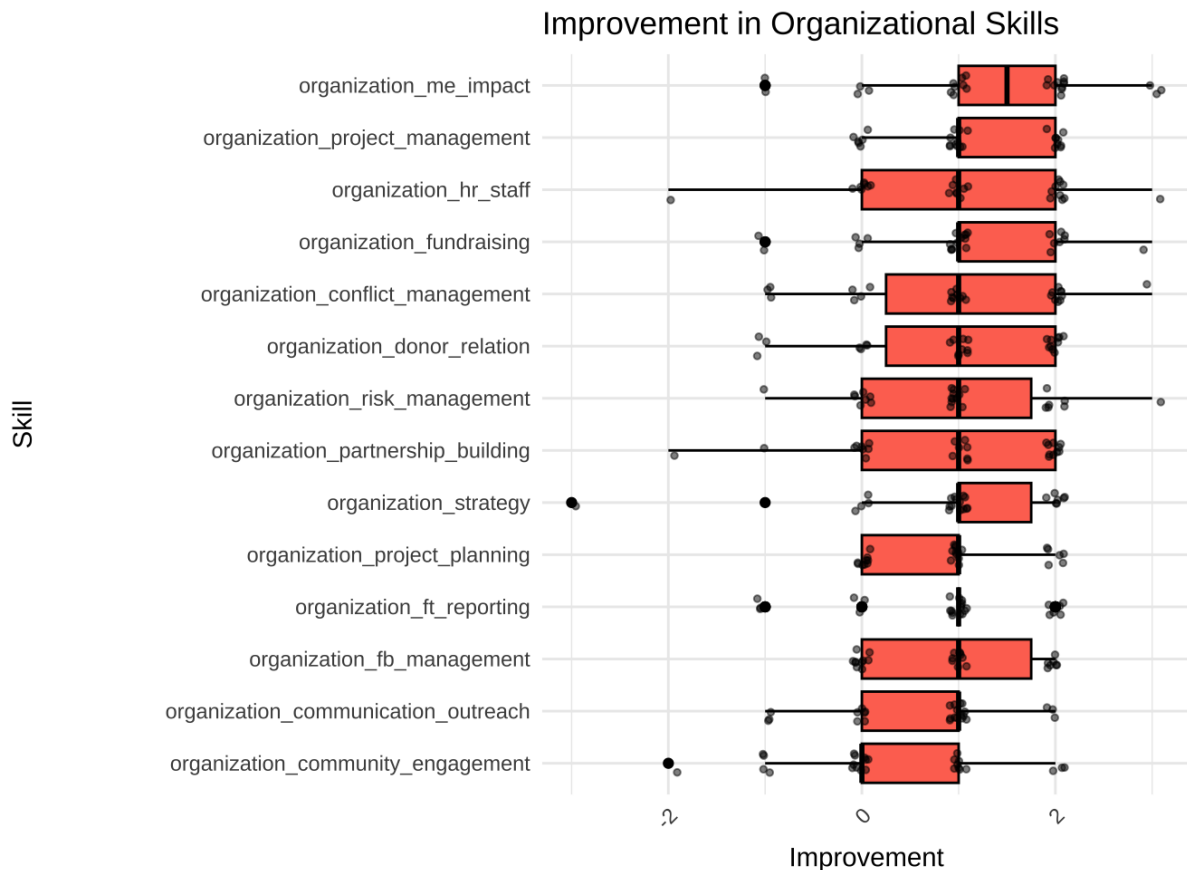


Figure 6: Organisational Capabilities Improvement

2.4.3 Comparison

Figure 7 allows us to compare both individual and organisational skills in terms of mean improvement, offering a comprehensive view of the impact of the fellowship across these two categories, and showing which skills experienced statistically significant improvement as a result.

We conducted a Wilcoxon signed-rank test, a non-parametric statistical test commonly used to compare paired data and assess whether the median of the differences between pre- and post-CCF ratings is significantly different from zero. This test allowed us to evaluate whether the improvements in each skill were statistically significant.

The green bars in the graph represent skills that showed statistically significant improvement, as indicated by the Wilcoxon test, while the red bar indicates that **Community Engagement** did not exhibit statistically significant improvement, meaning that for this skill, the changes in scores were not consistent enough to be deemed reliable, aligning with previous findings of a median improvement of 0.

Monitoring and Evaluation/Impact Measurement shows the highest mean improvement, indicating it was the skill with the greatest overall improvement

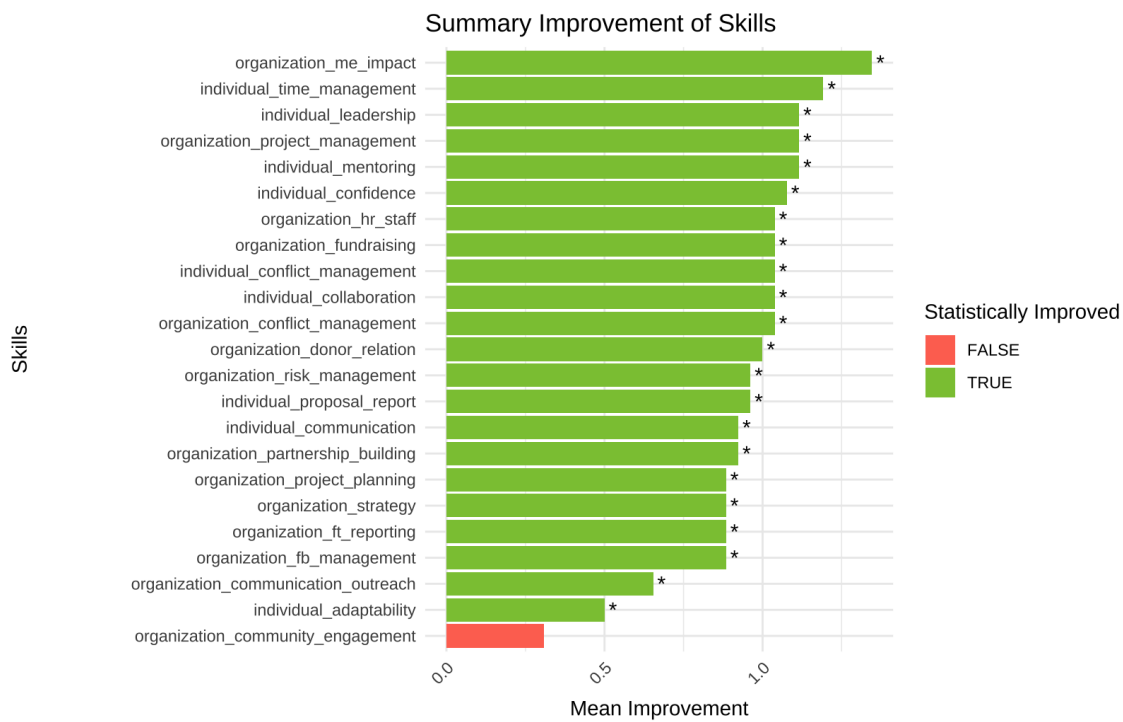


Figure 7: Average Improvement Across All Skills